

ROLLING BLACKLAND
RANGE SITE DESCRIPTION

PE 31-44 — production will be less on the
ranch; rainfall is 24-30 annually

1. PHYSIOGRAPHIC FEATURES: This site is usually sloping to gently rolling with slopes ranging from 3 to 5 percent predominantly. Some areas may have slopes up to 8 percent.
2. SOILS:
 - a. The soils of this site are moderately deep, gray to very dark gray heavy clays and clay loams that are crumbly and often crack when dry. These soils take up water slowly once they are wet enough to close up the cracks. Fertility is high and water storage capacity is high, however, percent of water available to plants is low.
 - b. Soil taxonomic unit which characterize this site:
 - Tordia clay
 - Monteola clay
 - Coy clay loam
 - c. Specific site location:
3. CLIMATE:
 - a. The average annual rainfall ranges from 23.5 to 33.8 inches. The greatest amounts fall in the period August-September-October. November through March are the driest months. The relative low rainfall in July and August coupled with high temperatures causes a mid-summer slump in the growth curve.
 - b. High winds are common from late February through mid-April which causes large losses by evaporation from the soil surface, especially where the surface is exposed. Annual evaporation ranges from 52 to 58 inches per year.
 - c. The average growing season of warm season plants is about 290 days. The last killing frost occurs about February 20 and the first frost about December 5. Temperatures average from 51° to 54° F in January and from 83° to 86° F in July. Warm season plants normally make about 60 to 70% of their growth between March 15 to June 15 and most of the remainder in September, October and early November.

Approved: 5/16/83
Herb Senne

4. CLIMAX VEGETATION:

- a. The climax vegetation of this site is an open prairie. This site is dominated by mid and short grasses such as alkali sacaton, Arizona cottontop, lovegrass tridens, two and fourflower trichloris, sideoats grama, vine-mesquite, curlymesquite, buffalo, Texas winter grass, and plains bristlegrass.

Relative Percentage of Total Plant Community (air-dry weight)

Grasses	95%	Woody	T	Forbs	5%
Alkali sacaton	15	Spiny hackberry		Snoutbean	
Arizona cottontop	10	Condalia spp.		Maximillian	
		Acacia spp.		sunflower	
Lovegrass tridens	5			Gayfeather	
				Bushsunflower	4
Twoflower trichloris	5			Yellow neptunia	
Fourflower trichloris				Western indigo	
				Bundleflower	
Sideoats grama	20			Milkpea	
Vine-mesquite				Orange Zexmenia	
				Annual forbs	1
Texas cupgrass					
Pinhole & silver	10				
bluestem					
Texas bristlegrass					
Plains bristlegrass					
Southwestern bristle-	20				
grass					
Texas wintergrass					
Buffalograss	10				

- b. As retrogression occurs, Texas wintergrass, plains bristlegrass, curlymesquite, and buffalograss are likely increasers. In a deteriorated condition any of the following common invaders may dominate the site; red grama, red threeawn, tumble windmillgrass, Texas grama, and prairie coneflower. Mesquite, spiny hackberry, whitebrush, agavita, and pricklypear frequently increase, or invade. As retrogression continues, woody spp. tend to dominate the site.

- c. Approximate total annual yield of this site in excellent condition ranges from 2500 pounds per acre in poor years to 4000 pounds per acre of air-dry vegetation in good years.
5. WILDLIFE ADAPTED TO THE SITE: This site was originally inhabited by dove and quail; where brush has encroached the site is occupied by deer.
6. ESTHETIC AND RELATED VALUES: Colorful forbs dot the landscape throughout spring, summer and early fall, when moisture is adequate. Perennials such as maximillian sunflower, gayfeather, winecup, dayflower and orange zexmania combine their colors with annuals such as eveningprimrose, gaillardia and blackeyesdusan to produce a beautiful array of yellows, reds and blues.
7. HYDROLOGIC CHARACTERISTICS: Soils in this site are grouped into hydrologic group D. They have a high runoff and erosion potential. When hydrologic condition of the vegetative cover is good, the hydrologic curve number is about 80. Refer to SCS National Engineering Handbook, section 4, to determine runoff quantities from these curves. When the hydrologic characteristic of the vegetation condition is less than good, field investigations are needed to determine hydrologic curve number.
8. GUIDE TO INITIAL STOCKING RATE:

a. <u>Condition Class</u>	<u>Percent</u>	<u>Ac/AU/Yearlong</u>
	<u>Climax Vegetation</u>	
Excellent	76 - 100	10 - 12
Good	51 - 75	11 - 17
Fair	26 - 50	16 - 24
Poor	0 - 25	24 +

b. Introduced Species

<u>Percent</u>	<u>Ac/AU/Yearlong</u>
<u>Ground Cover</u>	
100 - 76	10 - 12
75 - 51	11 - 14
50 - 26	13 - 17
25 - 0	17 +

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. For Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Arizona cottontop	Silver bluestem	Most other grasses
Lovegrass tridens	Bristlegrass	Western indigo
Fourflower Trichloris	Texas wintergrass	Bushsunflower
Sideoats grama	Curlymesquite	Annual forbs
Vine-mesquite	Snoutbean	Buffalograss
Texas cupgrass	Threeawn	
Pinhole bluestem	Alkali sacaton	

b. For Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Bushsunflower	Spiny hackberry	Most other grasses
Maximillian sunflower	Acacia spp.	Condalia spp.
Orange zexmenia	Texas wintergrass	
Bundleflower		
Western indigo		
Snoutbean		
Gayfeather		
Annual forbs		

c. For Quail and Dove 5/

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Croton seed	Other grass seed	Most woody plants
Sunflower seed	Mature grasses and	
Ragweed seed	forbs	
Bristlegrass seed		
Most annual forb seed		
Tender grasses and		
forbs (quail)		

1/ Definitions of terms and an explanation of interpretations is given on a separate page which is attached or submitted with each group of range site descriptions.

LEGEND AND DEFINITIONS FOR RANGE SITE DESCRIPTIONS

- 1/ This rating system provides general guidance as to animal preference for plant species. It also indicates possible competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animals, upon plant palatability and nutritive values, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect a plant's ecological place in the climax plant community.

The following definitions apply to cattle, sheep, goat, deer and antelope grazing.

Primary: These species generally decrease when the climax plant community is subjected to continuous heavy grazing pressure by the animals listed.

Secondary: These plants usually increase initially, then decrease when the site is subjected to continuous heavy grazing by the animals listed.

Low Value: These plants continue to increase or invade with heavy continuous grazing use of the site.

For peccary and birds, the terms primary, secondary, and low value indicate species preference only. They do not indicate plant response to feeding pressure, nor do they have any ecological significance.